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Conference Abstract

Leveraging Collective Experience to Digitize the Fossil Insects of Los Angeles

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Abstract

The Invertebrate Paleontology Collection at the Natural History Museum of Los Angeles County (NHMLA) has received support from the United States National Science Foundation (NSF DBI 1702342) to digitize the museum's unique and historic collection of 28,000+ fossil insects. The primary goal of this project, "Fossil Insects of L.A.", is to increase access to these collections for both research and education. Key collections to be become discoverable through iDigBio and iDigPaleo include the Georg Statz Collection (Oligocene, Rott Formation, Germany) and three faunas from Southern California: Barstow (Miocene), Rancho La Brea (Pleistocene), and McKittrick (Pleistocene).

Fossil Insects of L.A. constitutes the final contribution to the Fossil Insect Collaborative Thematic Collections Network (TCN), a consortium of institutions that have been digitizing the largest fossil insect collections in the United States. As a project beginning at the tail-end of the TCN's active funding, Fossil Insects of L.A. is actively leveraging existing TCN knowledge and resources to streamline workflows and efficiently achieve project goals. In addition to basing imaging and preservation protocols on those designed by TCN partners, Fossil Insects of L.A. is using a layered approach to provide high-quality taxonomic information without sacrificing the pace of specimen digitization. Previously unidentified specimens are initially identified only to Order, allowing them to quickly continue through the digitization process; specimens can then be re-examined by experienced project participants and external experts, who are able to reference the specimen images

generated during digitization. A critical and novel aspect of this component of the project's workflow is the concurrent digitization of the literature associated with the Statz Collection. These data will be used as a test case for the "Enhancing Paleontological and Neontological Data Discovery API" (ePANDDA) project (NSF ICER 1821039), which seeks to associate related datasets found in iDigBio, iDigPaleo, and the Paleobiology Database.

Fossil Insects of L.A. will digitize and make 10,960 specimens publically available online, of which over 6,200 will include images. An additional 15,684 specimen records from the Rancho La Brea Tar Pits will also be included in the data mobilization. In doing so, Fossil Insects of L.A. intends to dramatically enhance the research potential of these formerly hidden collections, as well as synthesize and demonstrate digitization best practices generated through the TCN.

Keywords

digitization, iDigBio, fossil insects

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